

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,263,923 B1
DATED : July 24, 2001
INVENTOR(S) : James A. Castillo

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

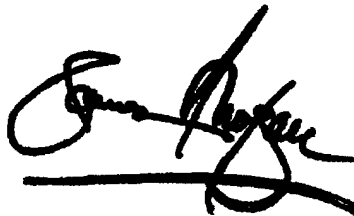
Title page.

The title page showing the illustrative figures, should be deleted to appear as per the attached title page.

Signed and Sealed this

Sixth Day of August, 2002

Attest:

A handwritten signature in black ink, appearing to read "James E. Rogan", written over a horizontal line.

Attesting Officer

JAMES E. ROGAN
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Castillo

(10) Patent No.: **US 6,263,923 B1**
(45) Date of Patent: **Jul. 24, 2001**

(54) **DEVICE FOR MAINTAINING SEPARATE INGREDIENTS IN LIQUID FOOD PRODUCTS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/493,361**

(22) Filed: **Jan. 28, 2000**

Related U.S. Application Data

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(51) Int. Cl.⁷ **B65B 1/04; B65B 3/04; B67C 3/02**

(52) U.S. Cl. **141/100; 141/104; 141/110; 141/112; 220/501; 220/502; 215/227; 215/DIG. 8; 206/219; 206/222**

(58) Field of Search **141/100, 102, 141/104, 110, 112; 222/83, 129, 142.5, 94-100; 220/23.88, 503; 215/6, 227, DIG. 8; 206/219-222**

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,179,275 4/1965 Roskam.
3,225,915 12/1965 Wise.
3,779,372 12/1973 de Lloret.
4,024,952 5/1977 Leitz.
4,221,291 9/1980 Hunt.
4,264,007 4/1981 Hunt.
4,618,444 10/1986 Hudson.

5,064,073 11/1991 Folland.
5,114,011 5/1992 Robbins, III.
5,431,276 7/1995 Lialin.
5,529,179 6/1996 Hanson.
5,885,635 3/1999 Spring et al.
6,003,728 * 12/1999 Elliott 222/81
6,047,818 * 4/2000 Warby et al. 206/221
6,059,443 * 5/2000 Casey 366/130
6,152,296 * 11/2000 Shih 206/222

* cited by examiner

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(57) **ABSTRACT**

A device for maintaining ingredients separately within a container, of the type having a removable container cap applied on a neck with a central opening, has a sub-container body mounted in the container neck which is formed with a proximate end having screw threads which can be engaged with internal screw threads in the container neck for holding them securely together to allow the ingredients to be shaken out of the sub-container body and mixed with fluid in the container. The sub-container body can have inner divider walls forming multiple compartments with respective orifices for dispensing ingredients selectively from the compartments. The sub-container body may be sealed to the underside of the cap with a sealing film, or sealed on the neck rim and held by the cap. In one version, the proximate end of the sub-container body has a protruding shape with inclined walls for guiding it into the neck opening. In other versions, the sub-container body is formed integrally with the container cap, or is formed as an annular ring shape carried between inner and outer flanges of the cap. These improved devices allow viscous or powdered ingredients to be mixed by shaking with fluid in the container without risk of spilling or splashing outside the container.

4 Claims, 22 Drawing Sheets

